

NLS II Projected Mission Model

For the purposes of assessing launch service needs for the NLS II Contract, NASA is considering the following mission model for its future launch service requirements. The mission model listed below is for planning purposes only, and is subject to change.

Launch Vehicle Class	Projected Number of Missions									
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Small ¹	1	1	0	2	1	0	1	2	0	0
Medium ²	0	0	1	1	2	3	2	0	3	1
Intermediate ³	0	0	1	1	1	3	2	4	2	3

¹ Small Class typically encompasses the following performance range:

Up to 1335 kg to 28.5 deg inclination (600km)

Up to 915 kg to 90 deg inclination (600km)

Up to 445 kg to C3 = -2 (Lunar)

Up to 425 kg to C3 = 0 (Earth Escape)

Up to 325 kg to C3 = 12 (Mars)

² Medium Class typically encompasses the following performance range:

Up to 5185 kg to 28.5 deg inclination (600km)

Up to 3305 kg to 90 deg inclination (600km)

Up to 1870 kg to C3 = -2 (Lunar)

Up to 2010 kg to C3 = 0 (Earth Escape)

Up to 1240 kg to C3 = 12 (Mars)

³ Intermediate Class typically encompasses the following performance range:

Up to 23180 kg to 28.5 deg inclination (600km)

Up to 21405 kg to 90 deg inclination (600km)

Up to 9615 kg to C3 = -2 (Lunar)

Up to 9305 kg to C3 = 0 (Earth Escape)

Up to 7525 kg to C3 = 12 (Mars)